

Abstract

After cleaning the front and back sides of a silicon wafer with a liquid SC-1 and liquid SC-2, the front and back sides of the silicon wafer are cleaned with an HF solution to be water-repellent surfaces. Following that, an epitaxial layer of silicon is formed on the front side. Consequently, there can be reduced stacking faults after formation of the epitaxial layer and occurrence of cloud on the back side. Alternatively, the front and back sides of a silicon wafer are cleaned with the liquid SC-1 and liquid SC-2, and then the back side of the silicon wafer is cleaned with an HF solution to be a water-repellent surface while the front side is cleaned with purified water to be a hydrophilic surface. Following that, an epitaxial layer of silicon is formed on the front side. Consequently, there can be reduced mounds on the front side and occurrence of cloud on the back side.